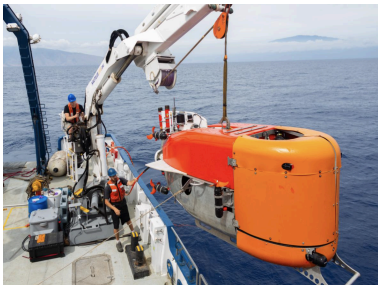
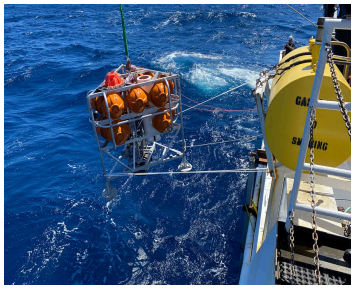
OCEAN EXPLORATION COOPERATIVE INSTITUTE | EXPLORING THE NATION'S BLUE FRONTIER

OCEAN EXPLORATION TRUST | UNIVERSITY OF NEW HAMPSHIRE | UNIVERSITY OF RHODE ISLAND
UNIVERSITY OF SOUTHERN MISSISSIPPI | WOODS HOLE OCEANOGRAPHIC INSTITUTION

oeci

Dive into the **Bridge to Ocean Exploration (B2OE) Program** with the Ocean Exploration Cooperative Institute (OECI) at the **University of Rhode Island's (URI) Graduate School of Oceanography (GSO)**! Dip your toes into the multidisciplinary world that is ocean science with opportunities in data science, ocean engineering/robotics, computer programming, deep sea biology, and multimedia production.



The OECI (https://web.uri.edu/oeci/) is a unique consortium of top oceanographic institutions: URI, Woods Hole Oceanographic Institution (WHOI), University of New Hampshire, the University of Southern Mississippi, and the non-profit organization, Ocean Exploration Trust. They work together to push the boundaries of ocean exploration with research and innovation in remotely-operated and autonomous vehicle operations, virtual engineering connectivity, and ocean science communication and engagement.

A core mission of the OECI is to inspire future generations of ocean scientists and engineers, and foster Blue Economy workforce development. The B2OE Program is an experiential learning program key to advancing this mission. Currently, the OECI is recruiting **up to 10 students** to create a 5th B2OE Cohort and participate in this **PAID**, **part-time program**. Potential, student project pathways may include:

Computer science/programming
Ocean exploration data science
Ocean engineering and robotics
Deep sea biology
Virtual environments and 3D models
Science communication and video production

Project Pathways Breakdown- Ocean Engineering (there are FOUR potential project tracks)

- Ocean engineering: coastal observatories (Dr. Stephen Licht)
    - The student will participate in field operations and experiments to help us stand up the new coastal observatory at South Kingstown Town Beach. The coastal observatory is intended to provide students with experience using data collection systems ranging from surface and underwater robots to wave buoys and flying drones. The student will help us develop and test the experimental protocols and instructional modules for the use of the robotic systems.
- Ocean engineering: benthic observing systems (Dr. Andrew Davies)
    - The Davies lab looks to recruit a student with interest and experience in mechanical engineering, computer-aided design, 3D printing (filament and resin) to assist in robotics development projects and benthic observing systems.
- Ocean engineering: remote cameras and systems controls (Dr. Andrew Davies)
    - The Davies lab is developing a control system for a remote camera unit that has multi-sensor capabilities. The project will entail front-end control development as well as interface programming with serial and other networked components that will communicate via fiber optic cable. Experience or interest in programming robotics, some background in Python, web-based languages would be beneficial for this project.
- Systems engineering: underwater robotics (Dr. Mingxi Zhou)
    - Objective: Design/prototype a magnetic-based connection for heterogeneous underwater robots to physically connect to each other. The connection will be flexible allowing the robot team to morph into different shape configurations.
    - Qualifications:
        - Experienced in CAD skills using Fusion360 or similar.
        - Basic understanding of electronics and wiring.
        - Basic knowledge about programming in python or C++
    - Expected outcome(s)
        - Gain experience in system development from design to prototyping to test.
        - Gain experience in mechatronics system
        - Gain experience in light sensing using photocells and data analysis

- *Useful coursework/experience requested for the ocean technology project pathway:*
    - Basic spreadsheet (Excel, Google Sheets) and office software (Word, PowerPoint)
    - Interest/experience in using/developing software tools
    - Interest in 3D mechanical or electrical design, and rapid prototyping technologies such as 3D printing.
    - Desired qualifications:
        - Familiarity with coding languages (especially Python), web/database development or computer aided design, electronics/wiring basics. Related coursework may include: Programming Concepts, Introduction to Data Analytics, Database Design & Management, Web Development, CAD, Mechanical or Electrical Engineering.

Benefits to B2OE Program participation:

- Up to $17/hour (paid via two stipends, one in early March 2026, and the other in late May 2026)
- Exposure to cutting-edge ocean science, engineering, and media production technologies and best practices within the OECI
- Collaboration with OECI personnel; field trips to tour URI, WHOI, and other facilities, as well as local industry (if/when possible)
- Opportunity to remotely participate in NOAA *Okeanos Explorer* and EV *Nautilus* expeditions
- Peer-to-peer interaction to build communication skills
- Information exchange and networking opportunities with industry professionals during a virtual Blue Economy Career Awareness Fair

In addition to the above mentioned part-time experience, **additional program requirements and expectations include**:

- Time commitment of up to 10h/week (December 2025- May 2026)
- Potential for onsite and/or tele-work
- Weekly tag-ups with mentors to gauge project progress and answer questions (mentors are also available via email for questions, etc. at any time)
- Participation in OECI student events, including Lunch and Learn networking events and a virtual Blue Economy Career Awareness Fair
- Final project summary report and presentation
- Participation in pre- and post-experience 360˚ evaluation

Eligibility:

- U.S. Citizenship (or F-1, J-1 visa status if applicable)
- Currently enrolled CCRI students (undergraduate/associate's degree, and/or workforce certificate)
- Degree, major, or intent to major in a field relevant to the OECI's mission; these can include, but are not limited to: STEM (science, technology, engineering and math), computer science, media production and graphic design, communications, education, and/or business operations/administration.
    - *Preferred (but not required): Mechanical/Electrical Engineering, Manufacturing and Design, Biotechnology, Environmental Sustainability, Computer Studies (all concentrations)*

B2OE Program Timeline/Key Dates:

Interested CCRI students must complete the OECI B2OE online application by on or before 11:59 pm ET, October 26, 2025.

- In addition to this application, interested individuals will also be required to submit their **current resume or curriculum vitae (CV),** with **3 professional references listed** (who can speak to the applicant's character and professional and/or academic background- this can be a professor, advisor, teacher, community member, work supervisor, mentor, etc.).

- Potential participants will be **notified by November 7, 2025, for a virtual interview.** Applications will be reviewed and analyzed based on merit and relevant experience.
- **Final selections** on or before **November 21, 2025**; candidates will be notified of their status.
- **An anticipated program start date, with an on-site orientation at URI's Graduate School of Oceanography campus in Narragansett, RI, will be on or before December 10, 2025.**

Questions? Please contact Holly Morin (holly_morin@uri.edu).